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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/726,117

12/02/2003

Hiroyasu Inoue

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02/09/2005

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EXAMINER

DUONG, THOI V

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/726,117

Applicant(s)

INOUE ET AL.

Examiner

Thoi V Duong

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-4 ~~is/are~~ pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-4 ~~is/are~~ rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 09/611,846.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Group I, Species IA (claims 2-4) in the reply filed on November 22, 2004 is acknowledged.

Accordingly, claims 1 and 5-9 were cancelled. Claims 2-4 are currently pending in this application.

### ***Priority***

2. This application appears to be a division of Application No. 09/611846, filed on July 07, 2000. A later application for a distinct or independent invention, carved out of a pending application and disclosing and claiming only subject matter disclosed in an earlier or parent application is known as a divisional application or "division." The divisional application should set forth the portion of the earlier disclosure that is germane to the invention as claimed in the divisional application.

### ***Inventorship***

3. In view of the papers filed November 22, 2004, the inventorship in this nonprovisional application has been changed by the deletion of Yoshinori Takana, Minoru Otani, Manubu Sawasaki, Tetsuya Fujikawa, Shougo Hayashi, Kazuhiko Sumi and Tomonori Tanose, who are not inventors of the invention now being claimed.

The application will be forwarded to the Office of Initial Patent Examination (OIPE) for issuance of a corrected filing receipt, and correction of Office records to reflect the inventorship as corrected.

***Claim Objections***

4. Claim 2 is objected to because of the following informalities: claim 2 recites the limitation "the structure on the second substrate" in lines 11 and 12. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

5. Claim 3 is objected to because of the following informalities: claim 3 recites the limitation "the auxiliary protrusion structure" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

6. Claim 4 is objected to because of the following informalities: claim 4 recites the limitation "the extending portion of the second electrode" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation "the protrusion structures extends outside" fails to point out where "outside" is. In the following rejection of the claim, the Examiner will interpret this limitation as "the protrusion structure extends outside the pixel."

9. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

Art Unit: 2871

regards as the invention. The limitation "opposing to an extending portion of the second electrode and comprising the auxiliary protrusion structure extending from the protrusion structure" fails to point out what opposes to an extending portion of the second electrode and comprises the auxiliary protrusion structure extending from the protrusion structure. In the following rejection of the claim, the Examiner will interpret this limitation as "the protrusion structure comprising an auxiliary protrusion structure extending from the protrusion structure and opposing to an extending portion of the second electrode."

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

11. Claims 2-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (Kim, USPN 6,567,144 B1).

Art Unit: 2871

Re claim 2, as shown in Figs. 6A, 6B, 7 and 8, Kim discloses a liquid crystal display comprising:

a first substrate 100 having a first electrode 10 (common electrode);

a second substrate 200 having a second electrode 20 (pixel electrode)

corresponding to a pixel;

liquid crystal having negative dielectric anisotropy sealed between the first and the second substrates (col. 1, lines 61-64); and

a structure 17 arranged on at least the first substrate 100 to control an alignment of the liquid crystal (Fig. 8 and col. 7, lines 31-37);

wherein the structure 17 on the first substrate 100 has a linear protrusion structure arranged diagonally to the pixel, and at least a part of end portions of the second electrode 20 (on the boundary 19 of the second electrode 20) being in the area decided by the protrusion structure and forming an obtuse angle with the protrusion structure extends outside the pixel (Fig. 8 and col. 7, lines 14-30).

Re claim 3, Kim discloses that the protrusion structure 17 comprises an auxiliary protrusion structure 171 extending from the protrusion structure 17 and opposing to an extending portion 19 (boundary) of the second electrode 20.

Finally, re claim 4, as shown in Figs. 14 and 17, Kim discloses the extending portion 19 of the second electrode 20 having a portion overlapping wirings 21 (gate lines) formed on the second substrate 200 via an insulating film 22.

Art Unit: 2871

**Conclusion**

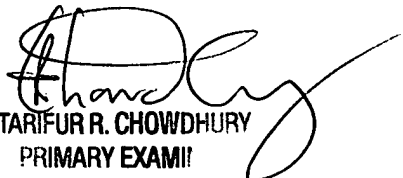
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (571) 272-2292. The examiner can normally be reached on Monday-Friday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached at (571) 272-2293.

Thoi Duong



01/23/2005



TARIFUR R. CHOWDHURY  
PRIMARY EXAMINER